

Bloomfield students receive hands-on engineer training

Thursday, February 26, 2009

By Nick Schneider, Assistant Editor

Future engineers are getting hands-on training at the high school level -- learning how to work as a team, problem-solve and cooperate to figure things out through the Project Lead the Way program.

A cooperative effort between the Purdue School of Engineering and Technology at IUPUI and the Indiana Department of Education brought together more than 300 students from 17 Indiana high schools -- including Bloomfield Junior-Senior High School -- in Indianapolis last Friday.

Twenty-two students from Bloomfield Junior-Senior High School were among the attendees at the Project Lead the Way (PLTW) student conference during National Engineers Week on the IUPUI campus.

The PLTW student conference is part of a larger curriculum initiative that promotes pre-engineering courses for high school students. The PLTW program allows participating students to take courses through which they can earn scholarship opportunities and potentially receive college credit at IUPUI. While the curriculum was first instituted in New York State high schools in 1997, Indiana now boasts the most participants in the program.

Candi Lang, PLTW teacher at Bloomfield Junior-Senior High School, attended the conference with her students.

"This is my third year teaching PLTW courses. In these classes students learn to work as a team, problem-solve, and work through their frustrations to figure things out. We have a lot of 'ah-ha' moments, and those are very cool to observe," said Lang. "Attending the conference is such a great experience for our students as it exposes them to new things they just aren't exposed to at a small school. This event allows them to connect with students from other high schools and learn about different programs and career fields."

At the conference, students had the opportunity to engage in two career themed sessions as well as a "hands-on" session. "Hands-on" sessions presented by IUPUI faculty, staff and students focused on topics such as bridge design, digital forensics, metal casting, advanced manufacturing and electronic music.

For the career-themed sessions professionals presented on various subjects. Those who presented had careers related to mechanical engineering, computer engineering, electrical engineering, construction technology, biomedical engineering, motorsports engineering, computer graphics and more.

Lang pointed out that PLTW is now offered in all five Greene County school districts. It's in its third year at Bloomfield.

The program gets valuable professional expertise from employees at Boston Scientific in Spencer and Naval Surface Warfare Center, Crane. Both have members on the PLTW advisory board and provide input on what kind of job skills are needed to succeed in the engineering field.

NSWC Crane employees also provide math tutoring help to Bloomfield students several times a week in before and after school sessions, she pointed out.

PLTW students are also encouraged to participate in the annual Crane Science Fair.

Lang said the PLTW Advisory Board is looking for volunteers from other science-related businesses in the Greene County area.

To volunteer contact Lang at Bloomfield Junior-Senior High School at 384-4550.

One local student who attended the conference and was impressed by what he witnesses was sophomore David Hestand.

"It was a nice experience. We got to do a lot of hands on activities," he told the Greene County Daily World.

Hestand said he got involved in the PLTW program as an eighth grader in an introductory class.

Since then he's been able to take the class for several more years.

The 10th grade student, who said he is still weighing his options for a career choice, said this year the class has been involved in several projects -- including a robotic marble sorter and ping pong ball cannon to learn about ballistics.

Speaking of the PLTW program, Hestand added, "It would be a good class for anyone to take, especially anyone who is interested in engineering."

Other Bloomfield students attending the conference included: Erick Araujo, Tyler Hansel, Blake Kindred, Austin Schulte, Nate Templeton, Brandon Thornsby, Alex Toon, Joshua Axe, Rachel Clapp, Joey Cooper, Ashley Dugger, Autumn England, Michelle Holz, Corey Kilgore, David Lynch, Bethany Martin, Bryce McGlothlin, Ross Miller, Jarad Rifner, Jakki Summerlot, and Liz Templeton.

Indiana Superintendent of Public Instruction Tony Bennett was the keynote speaker for the event.

"Project Lead The Way is a great example of a program that engages future Hoosier engineers while they are still in high school, helps them prepare a career path as they start thinking about college, and shows them the sort of cutting edge projects they may one day be working on," said Bennett. "We're proud to be a part of it and hope to see it continue to expand."

"Bringing students, teachers, and professionals together to participate in events like this are fantastic opportunities for the university and all that are involved. We are fostering the growth of interest in engineering and technology while connecting students and instructors with curriculum that raises the standards of learning and provides a distinct advantage," said Yurtseven, Dean of the School of Engineering and Technology, IUPUI .

Project Lead The Way is a not-for-profit organization that promotes pre-engineering courses for middle and high school students. PLTW forms partnerships with public schools, higher education institutions and the private sector to increase the quantity and quality of engineers and engineering technologists graduating from our educational system.

The PLTW curriculum was first introduced to 12 New York State high schools in the 1997-98 school year. Today, the programs are offered in some 3,000 schools in 50 states and the District of Columbia.

For more information about Project Lead The Way, visit <http://www.pltw.org> .

© Copyright 2009, Greene County Daily World
Story URL: <http://gcdailyworld.com/story/1506079.html>